

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
15 January 2004 (15.01.2004)

PCT

(10) International Publication Number
WO 2004/006522 A1

(51) International Patent Classification⁷: **H04L 25/02**

(21) International Application Number:

PCT/EP2003/006751

(22) International Filing Date: 25 June 2003 (25.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
02291658.9 3 July 2002 (03.07.2002) EP

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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, L.C., LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

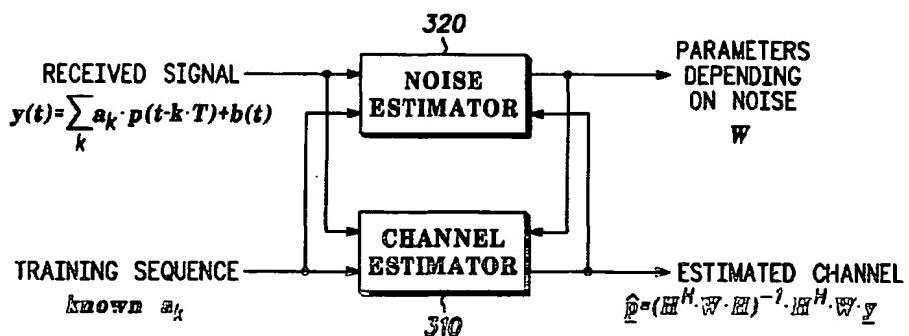
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ARRANGEMENT AND METHOD FOR ITERATIVE CHANNEL IMPULSE RESPONSE ESTIMATION



(57) Abstract: An arrangement (300) and method, for iterative channel impulse response estimation in a system such as a GSM/EDGE system employing a transmission channel, by: producing (310) from a received signal (y) a channel impulse response estimate signal (p); and producing (320) from the received signal (y) a noise estimate signal (w) which is iteratively fed back to improve the channel impulse response estimate signal (p). The noise estimate signal comprises a matrix (w) representing the inverse of noise covariance; the matrix may be calculated at each iteration or may be selected from predetermined values corresponding to statistics of expected noise. This provides the advantages of reduced complexity, independence of the equalization method used to produce the channel impulse response estimate signal, and consequent performance improvement.

WO 2004/006522 A1

INTERNATIONAL SEARCH REPORT

International Application No PCT/EP 03/06751
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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04L25/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, EPO-Internal, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01 61950 A (ERICSSON INC) 23 August 2001 (2001-08-23) abstract page 2, line 7 - line 8 page 2, line 16 - line 17 page 9, line 27 -page 12, line 30 page 15, line 5 - line 7 page 15, line 28 -page 16, line 18 figures 2,3 -----	1-20

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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Date of the actual completion of the international search

9 October 2003

Date of mailing of the International search report

17/10/2003

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/06751

Patent document cited in search report	Publication date	Patent-family member(s)	Publication date
WO 0161950	A 23-08-2001	AU 3647901 A EP 1256215 A1 WO 0161950 A1	27-08-2001 13-11-2002 23-08-2001